CLAIMS

1. A method of forming multiple simultaneous wireless connections by a wireless client in a wireless local area network, the method comprising the steps of:

obtaining a primary affiliation with a first wireless access point;

maintaining the primary affiliation with the first wireless access point while locating a second wireless access point;

engaging the second wireless access points to form a second affiliation with the second wireless access point while maintaining the primary affiliation with the first wireless access point.

2. The method of claim 1, wherein the second affiliation is a primary affiliation.

3. The method of claim 1, wherein the second affiliation is a secondary affiliation.

4. The method of claim 1, wherein the step of locating adjacent access wireless access points comprises scanning beacon signals from other wireless access points.

5. The method of claim 1, wherein the step of obtaining a primary affiliation with the first wireless access point comprises generating a first request to send message and sending the first request to send message to the first wireless access point.

6. The method of claim 5, wherein the step of engaging the second wireless access point comprises generating a second request to send message and sending the second request to send message to the first wireless access point.

7. The method of claim 6, wherein the second request to send message includes identification information about the second wireless access point.

8. The method of claim 5, wherein the step of engaging the second wireless access point comprises generating a second request to send message and sending the second request to send message to the second wireless access point.

9. The method of claim 8, wherein the second request to send message includes identification information about the first wireless access point.

10. The method of claim 1, further comprising receiving first data from the first wireless access point and receiving second data from the second wireless access point.

11. The method of claim 10, wherein the second data is received before receipt of the first data has completed.

12. The method of claim 10, wherein the wireless client has a first IP address associated with the first affiliation and a second IP address associated with the second affiliation.

13. A method of sharing wireless client information between wireless access points in a wireless communication network, the method comprising the steps of:

receiving by a first wireless access point a first message from a wireless client indicating that the first wireless access point is to host a communication session for the wireless client; and

receiving by the first wireless access point a second message indicating that another wireless access point is to receive information about the communication session for the wireless client;

transmitting the information about the communication sessions for the wireless client; and

continuing to host the communication session for the wireless client.

14. The method of claim 13, wherein the second message is received from the wireless client.

15. The method of claim 13, wherein the second message is a request to send message containing identification information of another wireless access point on the network.

16. The method of claim 13, wherein the step of transmitting the information about the communication sessions for the wireless client comprises transmitting information sufficient to perform a handoff to the second wireless access point.

17. The method of claim 13, further comprising coordinating with the second wireless access point to cooperatively share responsibility for communicating data to the wireless client.

18. The method of claim 13 further comprising the step of sending a synchronization message to the second wireless access point to form a dynamic switching group.

19. The method of claim 18, wherein the dynamic switching group is a virtual switching group, said virtual switching group comprising a multicast group in which entities of the group are configured to serve the wireless client.

20. The method of claim 18, wherein the dynamic switching group comprises at least the first wireless access point and the second wireless access point, and wherein each wireless access point in the dynamic switching group is configured to exchange information regarding the wireless client with other wireless access points in the dynamic switching group.

21. The method of claim 19, further comprising the steps of releasing the virtual switching group and reusing the virtual switching group with other wireless clients, when at least one of the wireless access points in the virtual switching group is no longer serving the wireless client.

22. A wireless access point, comprising:

an antenna configured to communicate using a wireless protocol with a wireless client;

a processor connected to the antenna and configured to control communications over the antenna;

control logic associated with the processor and configured to enable the wireless access point to share communication information about the wireless client with another wireless access point while maintaining communications with the wireless client over the antenna.

23. A wireless access point, comprising:

means for communicating with wireless clients over a wireless interface;

means for sharing communication information associated with the wireless client with another wireless access point while maintaining communications with the wireless client over the means for communicating.